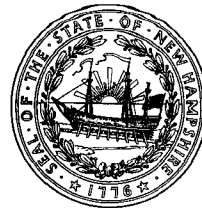




The State of New Hampshire
Department of Environmental Services



Michael P. Nolin
Commissioner

April 13, 2005
**Letter of Closure
For
Letter of Deficiency**

Mr. Don Drew
Mountain Lake Village Dam
RFD 2, Box 256-16
Woodsville, NH 03785

RE: Lower Mountain Lake Dam #112.12 in Haverhill
Letter of Deficiency (LOD) DAM #112.12
Issued on March 2, 1997 and (Reissued) on October 25, 2000

Dear Mr. Drew:

Based on a file review and a scheduled inspection conducted on September 24, 2004 of the above referenced dam, the Department of Environmental Services has determined that the referenced LODs will be closed out. Enclosed is a new LOD (#05-008) which supercedes the previous LODs which are now closed.

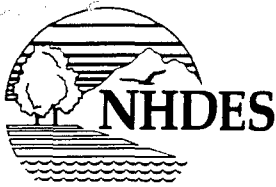
The closure of the previous LODs does not necessarily reflect compliance with the terms contained therein.

If you have any questions or comments, please contact me at 603-271-3406 or write to the Water Division at the address listed below.

Sincerely,


Jeffrey M. Flaney, P.E.
Dam Safety Engineer

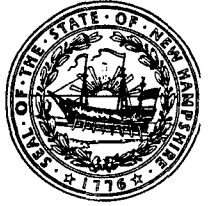
Enclosure: Copy of March 2, 1997 LOD, Copy of October 25, 2000 Reissued LOD
cc: Gretchen R. Hamel, Legal Unit Administrator ✓
Town of Haverhill
JMB/h:/safety/wendy/lo/11212closltr.doc



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095

(603) 271-3406 FAX (603) 271-7894



Mr. Barry Crites
Mountain Lake Village District
RFD 2, Box 256-16
Woodsville, NH 03785

October 25, 2000
Letter of Deficiency (Reissued)
DAM #112.12

RE: Lower Mountain Lake Dam, Haverhill

Dear Mr. Crites:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on August 29, 2000. During this visual inspection and/or file review, the following deficiencies were observed:

1. Brush and small trees were growing from the upstream and downstream embankments of the dam and within 10 feet of the downstream toe of the dam. The District members claimed that mowing would take place in the fall 2000;
2. The 60-inch primary outlet showed signs of internal corrosion;
3. The seepage noted previously around the outside of the 24-inch pond drain was still apparent. Seepage was also noted along the toe of the embankment, on either side of the pond drain. A wooden V-notch weir had been installed along the toe, to the right of the pond drain, to measure seepage. The weir was not measuring the seepage from the pond drain and was difficult to access and measure. Standing water at the discharge end of the low level outlet made inspection for seepage difficult;
4. The 24-inch low-level outlet pipe showed signs of internal corrosion; and
5. There is no emergency action plan on file with DES.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

By December 4, 2000:

1. Remove brush and trees from the upstream and downstream embankments of the dam and from within 10-feet of the downstream toe of the dam;
2. Submit a draft emergency action plan for review by this office;
3. Provide a schedule for performing an internal inspection of the 60-inch primary outlet pipe and the 24-inch low-level outlet pipe. Both showed signs of internal corrosion;

By September 1, 2001:

4. Perform an internal inspection of the 60-inch primary outlet pipe and the 24-inch low-level outlet pipe. Based upon the results from these inspections, additional work may be required. In regards to the low level outlet, a plan should be formulated to either rehabilitate the current system to a readily operable and reliable condition OR install an alternate system to allow the pond to be lowered as needed; and

On a continuing basis:

5. Monitor the seepage noted around the exterior of the low level outlet and along the toe of the embankment, either side of this pond drain.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form. Please note that the LOD that was initially issued in March of 97 is still open and has resulted in this reissued LOD. Enclosed is a copy for your reference.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,


Grace E. Levergood, P.E.
Dam Safety Engineer

Attachments DB8, DB13, March 97 LOD

cc: Gretchen Rule

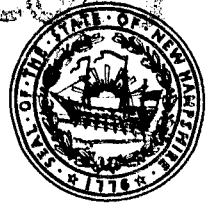
Town of Haverhill

Certified # 7099 3400 0002 9772 8144

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State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
64 North Main Street, P.O. Box 2008, Concord, NH 03302-2008
(603) 271-3406 FAX (603) 271-7894



March 2, 1997
Letter of Deficiency
DAM # 112.09 and 112.12

Mountain Lakes District
RFD 2, Box 256-16
Woodsville, NH 03785

RE: Upper Mountain Lake Dam #112.09 and Lower Mountain Lake Dam #112.12, Haverhill

Dear Sir/Madame:

On September 20, 1996, the Department of Environmental Services (DES) conducted an inspection of the subject dam. This inspection was conducted in accordance with RSA 482:12 and Env-Wr 502.02. During the visual inspection and/or file review, the following deficiencies were observed:

DAM #112.09 (UPPER DAM)

1. There is no operating and maintenance procedure on file for this dam;
2. The riprap, placed by the owner, along the downstream toe of the dam at the water level of the lower pond is not sufficient to protect the slope from erosion; and
3. The 18-inch low level pond drain is plugged and inoperable. *not plugged*

A simplified dam breach analysis was performed on this dam. The results indicated that a breach flow could overtop and possibly breach the Lower Mountain Lake Dam. Water levels resulting from the breach of both dams would result in overtopping of both downstream roadways and cause potential flooding to residences downstream. Based on this evaluation and the potential for loss of life in the event of a dam breach, this office has changed the hazard classification from a low hazard potential, Class "A" to a significant hazard potential, Class "B" structure. An emergency action plan is required for Class "B" structures.

DES believes that the above deficiencies can be corrected by the schedules noted:

By March 31, 1997:

1. Submit an operating and maintenance procedure for the dam; *yes*

By August 1, 1997:

2. Submit a draft Emergency Action Plan for review by this office. Contact Jimmy M. Leung for guidance in completing this document; *?*
3. Repair the 18 inch low level outlet;

4. Repair the downstream slope along the water surface elevation of the lower pond and establish a more appropriate erosion protection (perhaps large-sized riprap); and ✓ DOWE
8/29/97
-686

Regular Basis:

5. Monitor and supplement, as necessary, the riprap layer along the water surface elevation of the upstream side of the dam.

DAM #112.12 (LOWER DAM)

1. There are trees and brush present on the upstream face, downstream face and in the emergency spillway; ✓ 8-29-97
2. The top of the dam is well vegetated, however, there are small areas of tire ruts on the crest of the dam which should be filled, compacted and revegetated;
3. Minor seepage was noted around and possibly within the outlet of the 24" low level outlet;
4. Seepage was noted around the left side of the 60" outlet and along the toe of the left retaining wall;
5. The operability of the 24-inch shear gate on the pond drain was questionable. The operator chain was not noticeable from the upstream edge of the dam; and
6. There is no operating and maintenance procedure on file.

A simplified dam break analysis was performed on the dam using the National Weather Services model, SMPDBK. The model predicted that if the dam is breached, both downstream road crossings, Goose Lane Road and Route 112, would be overtopped. Flooding may occur in the vicinity of Swift River Village and there would be some flood damage to the Water Treatment Facility, approximately 500 feet below the dam.

Due to the potential for downstream property damage and loss of life, in the event of a dam breach, it is recommended that the hazard classification of this structure be upgraded from a Class "A" to a Class "B" structure. An emergency action plan is required for Class "B" structures.

DES believes that the above deficiencies can be corrected by the schedules noted:

By March 31, 1997:

1. Submit an operating and maintenance procedure for the dam; ✓

By June 1, 1997:

2. Remove the small trees and brush from the upstream face, downstream face and emergency spillway; ✓ 8-29-97
3. Fill, compact, and vegetate the tire ruts on the crest of the dam;

4. Investigate the operability of the 24-inch low level outlet shear gate and repair as necessary; and

By August 1, 1997:

5. Submit a draft Emergency Action Plan for review by this office. Contact Jimmy M. Leung for guidance in completing this document.

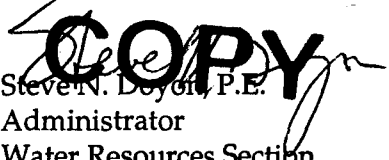
The DES is requesting that you submit a schedule for our review and approval within 14 calendar days that will provide for correction of the identified deficiencies by the dates indicated above. If we do not receive a schedule, we will consider issuing an Administrative Order requiring the deficiencies to be corrected.

With the upgrade of the dams to Class "B" structures, this office will perform a complete inspection of the dams once every four years. Also, the annual dam registration fee will be increased from \$50/year to either \$200 or \$300/year, depending upon the outcome of pending legislation.

We believe that the noted deficiencies warrant attention to ensure the continuing safe operation of your dam. We are available to assist you in any way that we can to correct the deficiencies promptly and effectively. Enclosed is a listing of items to consider and address when preparing the operating and maintenance plan and the EAP.

If you have any questions or comments regarding this Letter of Deficiency, please contact Grace E. Levergood or me at 271-3406, or write to the Water Division at the address listed on the top of the first page. Our normal business hours are from 8:00 a.m. to 4:00 p.m., Monday through Friday.

Sincerely,


Steven N. Doyon, P.E.
Administrator
Water Resources Section

enclosures

cc: Gretchen Rule

Town of Haverhill

Certified # 7786 913 292

SND/GEL/was/h:/wendy/lod/11209&12.lod